

**MEETING MINUTES – SEPTEMBER 20, 2000
FORMER LAKE ONTARIO ORDNANCE WORKS SITE (LOOW)
RESTORATION ADVISORY BOARD**

To: Restoration Advisory Board Members and Interested Parties
From: May Kay O'Mara, U.S. Army Corps of Engineers, Project Manager
SUBJECT: Minutes of September 20, 2000 RAB Meeting

RAB Members Present:	Affiliation:
William Roger Angus	Community Member
Lawrence Brennen	Community Member
Thomas Freck	Community Member
Tim Henderson	Community Member
Martin Hodgins	Community Member
Kent Johnson	NYS Department of Environmental Conservation
Charles Lamb	Town of Porter
Sandra Maslen for Darwin James Langlois	Town of Lewiston
Edward Lilly	Community Member
Bruce Mero	U.S. Air Force
Nona McQuay	Community Member
Dr. Nils Olsen, Jr.	Community Member
Neil Patterson	Community Member
Dan Rappold for Walter Polka	Community Member
Daniel Serrianni, Jr.	Community Member
John Syms	Somerset Group
Stephen Yaksich, Government Co-Chair	US Army Corps of Engineers, Buffalo District
Rebecca Zayatz	Chemical Waste Management, Inc.
RAB Members Absent:	
Mike Basile	USEPA
Paul Dicky	Niagara County Health Department
Clyde Johnston, Jr.	Community Member
Gary Smith	Community Member

Introduction and Welcome - Call Meeting to Order at 7:10 P.M. by Ms. Arleen Kreusch

- The meeting was called to order and began by having the RAB members and guests introduce themselves.
- The minutes from the last meeting were approved.
- Action Items from the last meeting were reviewed.
- The Corps is still addressing the issue of the status briefing on the buildings at the LOOW Site. This will remain an Open Action Item.
- Corps to check with the Town of Lewiston to find out who the Chairman of the Environmental Commission is. *James Allen is the Chairman of the Environmental Commission. Michael Rhoney is the Chairman of the Historic Preservation Commission.*
- There is no new information available yet regarding the Health Studies. This will remain an open Action Item.
- Documentation regarding the restraining orders on NFSS is available. The Corps is still addressing this issue and it will remain an open Action Item.

Slide Presentation – Corps of Engineers provided an overview of activities associated with the Formerly Utilized Sites Remedial Action Program (FUSRAP) at the Niagara Falls Storage Site. The Corps will be interviewing employees who worked at the Niagara Falls Storage Site or anyone with knowledge of operations at the Niagara Falls Storage Site prior to 1986. Judy Leithner provided an update of interviews conducted to date.

A brief twenty (20) minute question and answer period followed the presentation to address specific questions of any Board Member and members of the audience. A summary of questions and responses are presented in the tables below.

**Questions and Answers from Restoration Advisory Board Members
Regarding the Niagara Falls Storage Site**

COMMENT	RESPONSE
<p>Tim Henderson: Have you been in contact with the University of Rochester as far as the source, as far as the testing?</p> <p>My guess is they would probably have documents detailing what was sent here.</p>	<p>Judy Leithner: No, we were not.</p> <p>I hope they do because the paperwork that we had that said that none of it was sent here was from the University of Rochester. So I hope they do, we are a little concerned here that they say nothing was ever sent to your site, then they said they sent it Oak Ridge because people objected to it being buried near the river. If they dug through their files maybe they would find that, and we can try that, but so far it hasn't been successful. It was on the basis of their input that we reported that it didn't exist. Now we'll find out if it exists because these geophysical techniques are very good at finding anomalies below the soil, and any time we find an anomaly we are going to dig in. There is a trenching task that we are going to be giving our Remedial Investigation contractor and he has to wait until the geophysical people get this done because I have told him I don't want him trenching in where he thinks there is a storage tank buried, and maybe puncturing the tank or contaminating the site. So he will wait until the study is done and where ever there are anomalies he will trench, and if he finds something he will sample the soil around it. They are told if they do find animal carcasses they are to back out and we'll get someone in there who has experience with removing medical waste or animal waste.</p> <p><i>(Documentation regarding the Rochester Burial Area was made available at previous Restoration Advisory Board Meetings, and is also available in the Administrative Record File for the Niagara Falls Storage Site).</i></p>
<p>Daniel Serianni: Who was awarded the contract for the Geophysical Study?</p>	<p>Judy Leithner: SAIC was chosen because some people who do this work use one or two techniques, these people use all six. The other thing they have in particular is called electrical imaging, and right now they are the only corporation that has that. We went with the people who could give us the best picture of what is on this site.</p>

**Questions and Answers from Restoration Advisory Board Members
Regarding the Niagara Falls Storage Site (Continued)**

COMMENT	RESPONSE
<p>Nona McQuay: Dr. Leithner, do you have an idea as to what the time frame was for the burial of medical or animal waste?</p>	<p>Judy Leithner: Not really, what I understood was it was around the time of World War II. We are trying to track this down because the records say there is nothing there, yet we know from what the naked eye saw that there is or was.</p> <p><i>(Documentation regarding the Rochester Burial Area was made available at previous Restoration Advisory Board Meetings, and is also available in the Administrative Record File for the Niagara Falls Storage Site).</i></p>
<p>Tom Freck: You have located one radioactive area that was off of the Niagara Falls Storage Site which was on CWM property. Are you looking for the Rochester Burial Area which is off the Niagara Falls Storage Site?</p> <p>The Rochester Burial Area is what you are looking for is what you are saying.</p> <p>There is also another area that is called the Castle Garden Dump which contains Knolls Atomic Power Laboratory waste which also came from down state, which is in the same vicinity.</p> <p>My question is are you looking for the Castle Garden Dump as well as the Rochester Burial Area?</p>	<p>Judy Leithner: The extreme north, that would be the Lake Ontario property, and the geophysical study does not encompass that, but it encompasses the area that you pointed out to me.</p> <p>It's what we are looking for.</p> <p>If it turns out that it is off my site, what we have to do is get it declared a FUSRAP vicinity property, just like some of the others that had rad on it. Then we can go in and clean it up. There is a formal procedure that gets it designated, it a designation letter that says ok there is rad here, this is a problem, we designate it as a vicinity property to the Niagara Falls Storage Site, and then the next phase is go in and clean it up.</p> <p>I'm not allowed to do that on the NFSS site. If they discover it on the LOOW site, then it has to be declared a vicinity property, and the vicinity property is cleaned up under FUSRAP.</p>
<p>Tom Freck: When I am reading these documents, most of that stuff was buried 8 to 12 feet deep, and previous investigations and cleanups were done to four feet deep. So it is entirely possible that the surface was cleaned and the materials were still left in the ground. If you read through this stuff you see that it was buried quite deep. The remediation was just done on the surface</p>	<p>Judy Leithner: The geophysical studies that I am talking about that look for buried materials, some of the techniques will go as deep as 200 feet, some of them will go to 50 feet, and some only go to the first 6 feet. We are using all of these techniques in combination.</p>

**Questions and Answers from Restoration Advisory Board Members
Regarding the Niagara Falls Storage Site (Continued)**

COMMENT	RESPONSE
<p>Martin Hodgins: Castle Garden Road, is that on your site?</p> <p>Have you ever looked at these two books (The Federal Connection: A History of U.S. Military Involvement in the Toxic Contamination of Love Canal and the Niagara Frontier Region – New York State Assembly)?</p> <p>According to this book on page 6, exhibit 18, Castle Garden Road, number 4a, “Excessively contaminated materials such as gaps, process material, pipes, K-65 drums, etc.” are on this site.</p> <p>There are a lot of were’s on here, but there is no document that says that is has been taken away.</p>	<p>Judy Leithner: Yes it is.</p> <p>Yes I have.</p> <p>They were.</p> <p>The date on that report is 1981. That stuff was put in the mound in 1986. So when you read that report and you see the date 1981 and they talk about drums and piles on site, they aren’t there anymore.</p>
<p>John Syms: I beg to differ, they are on site.</p> <p>I’m not talking about my site.</p> <p>Yes there are, I don’t have the map right here tonight, but I’d be glad to bring it to the next meeting. I’m not trying to argue with you Judy, I’m just trying to make a point that the stuff that’s left on the site was never dug up, and was never put in your site, it still exists.</p> <p>I’m trying to help you.</p>	<p>Judy Leithner: I don’t know anything about your site.</p> <p>Well they aren’t on site.</p> <p>That’s what were are trying to find.</p> <p>OK, I understand where you are coming from.</p>
<p>Nils Olsen: It does document the Rochester Burial Area site in the report.</p>	<p>Martin Hodgins: It actually comes right with a map that kind of tells you.</p>

**Questions and Answers from Members of the Audience
Regarding the Niagara Falls Storage Site**

COMMENT	RESPONSE
<p>Linda Shaw (Somerset Group): The data from the Phase I Investigation, is that available either in paper form or on the internet.</p> <p>Why is that?</p> <p>When do you anticipate completion?</p>	<p>Judy Leithner: It will not be available until Phase I and Phase II are put together.</p> <p>Because it is an incomplete data package and people tend to look at it and say, they left this out, they did an incomplete study, and I refuse to do that.</p> <p>Probably next March. It's a big study. We could do it very quickly like I know a number of you would like us to do. If we do it quickly it will be a sloppy job, and then we will hear that it is a sloppy job. I will be doing this correctly. I will take no short cuts, it's costing a bundle of money to do it right, and so I don't ever want to be asked to hurry this up so you can have your data.</p>
<p>Marn Weld: And the more careful you are the more reassured I am, you can't be more thorough.</p>	<p>Judy Leithner: We are doing the best we can to find everything and categorize the risk.</p> <p>There are a couple of things that have been helpful over the last ten years, the first one is that the Government has asked us to look at chemical contamination also. So it's not just cleaning the rad and leaving stuff behind. As five or ten years have progressed analytical techniques get better and better so they can even measure smaller and smaller amounts. We hope that when we are done cleaning up the site it will be cleaned up so that no one has to worry about raising their child there.</p>

Slide Presentation - Corps of Engineers provided an overview of activities associated with the DERP-FUDS Program at the Former Lake Ontario Ordnance Works Site.

A brief twenty (20) minute question and answer period followed the presentation to address specific questions of any Board Member and members of the audience. A summary of questions and responses are presented in the tables below.

**Questions and Answers from Restoration Advisory Board Members
Regarding the Former Lake Ontario Ordnance Works Site**

COMMENT	RESPONSE
<p>Thomas Freck: Do you intend to look for this Rochester Burial Area and Castle Garden Dump that the radioactive materials are in? I'm pretty sure that it's probably not on Judy's area, it's most likely on your area. It's the Castle Garden M Street area. Are you familiar at all with where it is on site?</p> <p>So Judy can't look at it because it's not her site, and you can't look at it because it's radioactive and you aren't concerned with it?</p> <p>The two things you are dealing with is Plutonium which is one of the most toxic elements known to mankind in the Rochester Burial Area, and Cesium. I would think that you would want to get it under control, it would be nice to know.</p> <p>I'm pretty sure that it's off the areas that were already remediated.</p>	<p>Bill Kowalewski: I am familiar with the sites. I have read the Oak Ridge reports that were done back in the late 80's. They aren't included in our remedial investigation right now because we are limited to chemical contamination. We do rad screening on the material when it comes up just as a precaution, but it's not a focus of our investigation.</p> <p>That's not entirely true. Judy's investigation from what I understand will be focused on the NFSS, if needed it will extend beyond those boundaries, and she has described the process to do that. There are drawers full of reports in Oak Ridge on these vicinity properties. This question did come up several RAB meetings ago. So, I don't think there is any large disconnect in the program.</p> <p>Judy Leithner: I'm concerned too, and I will check when we get back to the Corps to see what it would take to take the investigation into that property. I know there are some properties that were designated as vicinity properties, and there are three still left on the CWM property. I will check to make sure, if it happens to fall on one of those I am allowed to investigate it. So I will check that because you are right somehow we have got to get at this if it's in there.</p> <p>That's what I thought, but then when I talked to this one person that we interviewed, he wasn't sure if it was on our side or on that side, so I will be investigating right up to the property line.</p>

**Questions and Answers from Restoration Advisory Board Members
Regarding the Former Lake Ontario Ordnance Works Site (Continued)**

COMMENT	RESPONSE
Tom Freck: You're talking about something that happened 40 years ago.	Judy Leithner: He kind of said that it has been a while. He did talk about excavating that stuff and looking at the creeks. This is the problem that we are having. Some of the problem is also that there has been a lot of work done there. A lot of the documents that people are accessing that say this stuff still exists are from the 80's and 70's. Sometimes they might be right and sometimes they might be cleaned up and so that is why we have to do such a thorough investigation of the property. These documents that existed in the 70's and 80's, they aren't right, but we don't want to leave anything behind. We know it needs to be addressed.
Charles Lamb: Slide 57, it had to with the Town of Porter water tower site. When you say a potential for lead based paint and incidental asbestos, do you think that it's important for the Town to investigate this further?	Bill Kowalewski: My feeling is that there is little to worry about, but from a regulatory standpoint you may want to take a look at it. <i>(A Copy of the Phase I report on the Town of Porter will be brought to the November 15, 2000 meeting.)</i>
Nona McQuay: On slide number 49, the test pit results, you mention cadmium and chromium, in particular being above background levels. Could you give us some idea as to how much above background levels they are and where the source of those chemicals might have been?	Bill Kowalewski: I don't have the values in my head, there is just too much data. I wouldn't speculate on the source, I do know that cadmium and chromium are found in paints, it is possible that it came from there, but I do not want to make any claim about how those chemicals got into the ground.
Sandra Maslen: When you power wash the pipes containing the TNT, where does that residue go?	Bill Kowalewski: What we do is we break into the pipelines at the two ends, we line the pits with polyethelene liner, and then put a great big plastic sump underneath the open end of the pipe,. We feed the power washer in, it's self propelled, the jets of water force it through the pipe. We then pull it back out and it scours with it the material that is in the pipe, which is then collected in the sump. We vacuum it out and we store it in the 20,000 gallon temporary tanks. So we recover all of the material from the pipeline that we power wash.
So why are you still concerned about removing that pipeline thereafter?	The original plan based on last year's data where we didn't find any TNT, was to simply remove it out of the ground without power washing it, sampling it and then disposing of it. I didn't feel comfortable doing that for fear of sending off a piece of pipe that had not been power washed which could have some TNT remaining in it. So we will power wash the pipelines in place. They will be filled with cement and left in the ground.

**Questions and Answers from Restoration Advisory Board Members
Regarding the Former Lake Ontario Ordnance Works Site (Continued)**

COMMENT	RESPONSE
Sandra Maslen: By filling them with cement, what does that accomplish?	Bill Kowalewski: Filling the pipelines with cement does two things. It prevents those pipelines from acting as a means for any contaminant that got in there from moving from point A to point B. The soils generally don't allow that, it's all clay. So plugging the lines prevents any movement of contaminants through them. It also binds any remaining contaminant or TNT if we happen to miss it.
<p>Daniel Serianni: On the samples of the TNT lines, did they do volume samples or did they do samples on the TNT?</p> <p>What do you do with the crystals that are near the ground?</p> <p>Has the ground been sampled or tested for TNT after it rains?</p> <p>Would rain allow the surface area to be exposed? I'm just curious if you went back and retested.</p>	<p>Bill Kowalewski: Let me summarize how we sample for the TNT, there are two different things. In the test pits we sample pipe contents for total explosives concentrations. We also sampled the crystalline material that we found on the surface. The material inside the pipe, in all but one case, came back with no TNT or less than 1%. The crystals we found on the surface we sent out a very minute quantity of that, and that crystal came back 99.5% TNT.</p> <p>Any TNT that is removed during the pressure washing operation is going to come out with the wash water and is placed in these great big temporary storage tanks. What we do is we fill those tanks up with water, and allow them to settle out. TNT is heavier than water. If there is any TNT in there those particles it will sink to the bottom and they will be in a semi-dissolved state. We will then sample those tanks at an upper level, we will sample the sludge, and then dispose of it based on those results.</p> <p>No, for those areas with the crystalline TNT on the surface, the explosives expert walked the entire pipeline in a 50 foot swath. The removal of the surface crystalline TNT was done by visual means, anything that looked like TNT was gathered up. We have not gone in and done any more digging in those areas.</p> <p>No we have not gone back and retested in the areas where the surface TNT was. The problem with this crystalline TNT is that the visual detection method is not very accurate. We had material that was visually suspected to be TNT and it came back that it wasn't. What we will have to do at the end of this job, and considering future removal actions, is take a look at the case where we found the crystalline TNT and we may require a follow up action.</p>

**Questions and Answers from Restoration Advisory Board Members
Regarding the Former Lake Ontario Ordnance Works Site (Continued)**

COMMENT	RESPONSE
<p>Daniel Serriani: How long is the pipeline that will be power washed?</p> <p>I meant how much of this section will be power washed.</p>	<p>Bill Kowalewski: There is about 3,750 feet of each pipeline remaining. Originally the pipeline was about 5,000 feet long.</p> <p>We will power wash the longest section that we can. To date the TNT pipeline that we found is broken up. In the 50's when Air Force Plant 68 was built they built it right over the top of the pipeline, they dug straight down to build the foundations. So we found very fragmented pieces of the pipeline.</p>
<p>Martin Hodgins: Have you ever thought about using canines to sniff this stuff out? Have you ever used canine because they are a lot more accurate than humans?</p> <p>I'm talking about the stuff that is on the surface A 50ft visual swath, could he not have a canine with him to pick up what he could not see?</p>	<p>Bill Kowalewski: I am fully aware of that from my experience in the Air Force. The real problem is these pipelines are four to ten feet below the ground.</p> <p>We could ask the question. But our focus here was to get the surface clear so we could pursue the work faster.</p>
<p>Tim Henderson: Does any of this pipeline run underneath current CWM landfills?</p> <p>So there is no chance of chemicals getting into that line?</p>	<p>Bill Kowalewski: There is one section of line that runs under what is called the north salts pond.</p> <p>Becky Zayatz: The answer is no. The lines run under a parking lot and under some vacant land. It does cross under one of our pipelines; no I'm sorry that section was removed so that isn't there at that point. It runs along the south side of one of the landfills and then on to the vacant portion of the property on the west side. It does not run under any of the landfills.</p> <p>Bill Kowalewski: There is one portion at the eastern end of the line that runs under the parking lot.</p> <p>Bill Kowalewski: No. The soils above and below the pipeline are clean.</p>

**Questions and Answers from Members of the Audience
Regarding the Lake Ontario Ordnance Works Site**

COMMENT	RESPONSE
<p>Joan Broderick: This is in response to the concerns that I raised at the April 12 meeting. I want to thank Judy Leithner, she sent me six pages of explanation and I learned a lot. I still have concerns and I am going to give those to Judy. I want you to understand why I made the statements I did and why I was concerned at that meeting.</p> <p>What I am concerned about is that CWM now resides on Former Lake Ontario Ordnance Works property and it is adjacent to the Niagara Falls Storage Site. The reason for my comment, and I think Tom has eluded to this when he was mentioning about testing on your site. You said no because it is not part of your site. I think this is the major concern here. I am not criticizing you, because you really answered my questions and I appreciate it. You did excellent reports and I'm glad that you have this committee here, and we're allowed from the audience to present. What I worry about is where the buck stops because this is a municipal, state, federal and to some extent private concern. It's easy to say it's now on CWM property, it's not included in our particular project. And CWM will say that it's not our problem because that was there before we took over the property. So whaling this whole thing down, that is where my concern is. That was what I was hearing from Tom, that's also what I was hearing from Tim.</p>	
<p>Linda Shaw: How many feet of TNT pipeline are there total?</p> <p>So you've dug 13 test pits along 5,000 feet?</p> <p>Do you think that's sufficient? If there are cracks in this pipeline as you mentioned that there may have been when the Air Force Plant 68 was built, couldn't it just have gone _____ in one spot that you haven't tested yet?</p> <p>No what I mean is couldn't it be under the ground?</p>	<p>Bill Kowalewski: Originally there was 5,000 feet installed in 1942. We are pressure washing and/or removing the remaining 3,750 feet.</p> <p>13 along 3,750.</p> <p>That's right, and that is why I decided not to remove the pipeline based on those lab results. I felt better power washing the entire line so that the chances of removing the TNT without missing a section are much better..</p> <p>It is possible. This is an interim removal action, it's not the final solution. It's possible that this could be readdressed later.</p>

**Questions and Answers from Members of the Audience
Regarding the Lake Ontario Ordnance Works Site (Continued)**

COMMENT	RESPONSE
<p>Audience Member: Have there been any samples taken on the Lewiston Porter school site?</p> <p>What does background mean?</p> <p>Only one sample was taken?</p> <p>What would we have to do to get more samples taken?</p>	<p>Sanrda Staigerwald (EA Engineering): There was one background sample taken.</p> <p>That means that there is an area that we pick where we do not believe there has been any chance of contamination.</p> <p>Only one then, and then there is a 30" outfall line from the LOOW wastewater treatment plant that goes out to the Niagara River and we collected samples on the school property along that line.</p> <p>Just the fact that you are presenting your concern to the Corps tonight.</p>
<p>Nils Olsen: A concern of the community is the proximity of the school to these sites, while I understand that your major point of emphasis is on the active portions of the two sites, if you want to respond to community concerns, I think you really do need to address the fact that the schools are here. Even if it seems implausible to you that there is anything on it, I can't help but think that one of the most serious concerns that people have, particularly with respect to the Lake Ontario Ordnance Works Site, is the fact that the school is located so close to it. And if there are ways to do more than background testing to reassure the community, I think it would be money well spent. This is an unusual situation to have a consolidated school district with every child in the community and a large number of employees who have been on this site for many years. I think if you want to answer the concerns of the community, you are going to have to address those too. And I think that it needs to be made public to the people in the community because we have a very unusual situation here.</p>	<p>Arleen Kreusch: We can do a news release before that starts. I'm sure we will have RAB meetings in between then so you will be updated as we get closer to that time.</p>

Health Study Presentation – Dr. John Vena, from the Environment and Society Institute at the University at Buffalo presented information on the different types of health studies, what is involved in health studies, what they can accomplish, and what they can not accomplish.

A brief twenty (20) minute question and answer period followed the presentation to address specific questions of any Board Member and members of the audience. A summary of questions and responses are presented in the tables below.

**Questions and Answers from Restoration Advisory Board Members and Members of the Public
Regarding Health Studies**

COMMENT	RESPONSE
Audience Member: Did you find a cancer cluster when you did your study in 1982?	Dr. Vena: No we didn't at that time.
Did you find a cluster of any disease of any nature?	We just looked at cancer.
Martin Hodgins: From 1990-1999, my neighborhood has 40 houses including mine, 6 people got cancer, two of them are already dead. That's a pretty good cluster I would say. That neighborhood is probably less than 1,400 feet long.	Dr. Vena: We would have to look at the age distribution, and how long they lived there. There are other things that determine it, so if I picked my own neighborhood, cancer is the second leading cause of death. We would have to look at if it were all different types of cancer, and what that would mean. If they were all Hodgkins disease that would be different. You can't just lump all of the same groups of diseases together; it has to be related to a certain exposure.
Martin Hodgins: I can't understand why we have all of this money set aside for the Corps to do all these studies and diggings. Why hasn't anybody set aside say half a million dollars or what ever the figure would be to do a new health study? According to your notes here the last real good study was done in the early 80's, we're talking the year 2000. Why can't someone do a study now?	Dr. Vena: That's one of the questions with all of these sites throughout the country is what has been the impact on the communities surrounding them, what have been the exposures, and how would you do it? If you want to do a study of this site, of this community, what are the options?
Audience Member: Between the years of 1972 and 1985 I lived in small community just outside of Ransomville, just on the borderline. I know 7 children that came out of this school district with Hodgkins Disease. But that's not a cluster? I'm not a Harvard or Yale graduate but that seems to tell me something, something is wrong. But nothing seems to get done.	The question isn't why isn't anything being done, lets talk about what the options are. <i>(The information package that Dr. Vena provided at the meeting is attached.)</i>
Audience Member: I think that instead of drilling one test whole on the Lewiston Porter School site, we should drill 200.	Dr. John Vena: So are the kids being exposed now, but the question is were those kids being exposed in the 60's and 70's. Nils Olsen: They used to run cross country right through the LOOW site. They don't anymore.

**Questions and Answers from Restoration Advisory Board Members and Members of the Public
Regarding Health Studies (Continued)**

COMMENT	RESPONSE
Audience member: What kind of study would you do?	Dr. John Vena: Lets just say we got a new governor in the state and he was willing to give a million dollars to the people in Lewiston-Porter to do a health study. So one question is any testing now doesn't tell you what people were exposed to 20 or 30 years ago.
Audience Member: Yes but that will tell us what we might have to do now to prevent it for the next 30 years.	Judy Leithner: Sir we do have money to do testing, we don't have money to do health studies.
Audience Member: What ever you want to call it, I just want to find out what is in the ground.	Dr. John Vena: To find out what's there and how to clean it up, that's what the Corps is working on now. The questions is should you study the population that is around there, and when were they exposed and during what time period, to what were they exposed. So the real problem with these environmental studies is even if we thought there was some dangerous stuff at the site, how could we study it, what would be the purpose of the study, and what would be the best thing to do, at the end would we even be able to say anything about it? So the real crux of the problem is how can you identify the population that was exposed? And what are the issues with regard to their potential risk and how you quantify it? They are all very difficult questions because a lot of the historical data does not exist. Even trying to identify the exposures of where stuff is now on the site is hard. So your question is what about the kids that were in that school. One type of study that can be done would be to take all of the kids that attended that school and track them down. Where are they, what's happened to them, how many of them developed Hodgkins Disease or testicular cancer, or whatever? What sites would be important to look at and what would be the exposure of interest? If it was radon or an inhalation hazard related to the site. So there would have to be some sense attributed to what you are targeting to do. Right now you have no resources, but if you did have resources you would target them to what you would think would be the most effective type of approach to a study. So that's one type of study. Or you may want to look at the site after it was decommissioned and people started to build homes around it, those people are the highest at risk, maybe you would want to identify those people and track them down. It would be a big job, that's one kind of cohort study that could be done.

**Questions and Answers from Restoration Advisory Board Members and Members of the Public
Regarding Health Studies (Continued)**

COMMENT	RESPONSE
<p>Nils Olsen: Isn't it true by the time these show up in health studies, isn't it too late? Doesn't it make more sense and wisdom to remove the risk? It's already been established, it's not even an if, there are carcinogens there, there is a tremendous amount. I think that one of the reasons that we are here is to address the risk. I thank God that there aren't positive health studies at this point. If there ever is, it's already too late, it means we're all affected.</p>	<p>Dr. John Vena: The idea of the health study is to try to document what the risk was for the people that lived there. One reason would be to say that there is only a certain number of people who actually get the disease and the study could determine what the risk level is. So you could say you have five times the risk of getting this disease. That means there is a whole bunch of people out there who don't have the disease yet but who are at risk, can you do something about those people by notifying them that they were at risk? They could receive medical checkups periodically, and make sure that they are screened for the disease in question. So there are reasons to do it if in fact there is a big group of people who are at risk and don't know it. Another reason to do the study is for compensation for people who have been harmed. If you can quantify that there is an association between this exposure that occurred at this site and the disease outcome, that helps determine that association. But that assumes that you have the ability to do the study and that you can quantify the risks. In these kinds of situations it is very difficult.</p>
<p>Linda Shaw: What should not be difficult though is the exposure assessment. This site had miles of ditches that were dug so that the waste could flow to the lake and river. It's not just the people that lived around the site, it's all of the people who lived near the water tower where the radioactive materials were stored, and all of these ditches that ran through the entire community. If this were a site that was owned by a corporation, the government would require the corporation to clean up the site. The corporation would have to do a risk assessment for the surrounding community and an exposure pathway assessment. That was not included in the presentation, that is part of the normal Superfund process, it's part of the RI/FS process and it tells where to prioritize your cleanup.</p> <p>What you don't say is how long that process is, how many years from step A to step B until you get there. I think what this community is saying is we know there is radiation here, there are some people who have died of cancer, maybe you didn't find a cancer cluster a long time ago. This isn't your average Superfund site. You've got a lot of radioactive material here.</p>	<p>Judy Leithner: The Risk Assessment is upcoming, that is part of the process and that is going to be done.</p> <p>Judy Leithner: It's not even a Superfund site.</p>

**Questions and Answers from Restoration Advisory Board Members and Members of the Public
Regarding Health Studies (Continued)**

COMMENT	RESPONSE
<p>Linda Shaw: I know it's not, but that's because you are the owner.</p> <p>Well maybe that's what this group should do, they should put it on the NPL, maybe they would get quicker turn around then.</p>	<p>Judy Leithner: There are things that can be in our program. They can at any time rate this site and put it on the NPL.</p>
<p>Dr. John Vena: So the assessment now is to determine what's on the site and where it has gone off the site.</p> <p>So there is stuff in that assessment in terms of the second chart that shows the exposure assessment and the effects assessment (<i>refer to the second page of the attachment</i>). The exposure assessment is locating the release of the agent and where does it go, is it in the water or the soil and how do people get exposed. Back in the early 80's the DOE consolidate this stuff and remediated as best they could at the time. So the question is now if there is a risk of exposure, then what would be the information that would come out of that, that would inform the need for an effects assessment. So maybe there will be more information that will come forward, and assessment can be made of what could be done or what should be done.</p>	<p>Judy Leithner: If it's gone, where it's gone, yes.</p>
<p>Nona McQuay: Is the Health Department a good resource that you think we could go to at this point?</p>	<p>Dr. John Vena: The only thing the State Health Department would do is redo what we did in 82 and update it. They only have the resources to use their cancer registry which would have the same limitation as we already discussed. They could say this is the cancer incidence in the Towns of Lewiston and Porter, and they are higher or lower than expected. To be honest I don't think it would tell you that much, other than just give you an update and say gee was there really a big peak of Leukemia or Hodgkins. It might be worthwhile, and you could ask the Health Department to do that.</p>
<p>Dr. John Vena: My question is the exposure assessment does indicate that there was radiation off site, and human populations were exposed, who would be responsible? Under Superfund, they do an exposure assessment if they find something. Then the Agency for Toxic Substance Disease Registry (ATSDR) is called in to do the health assessment.</p>	<p>Judy Leithner: It's still the ATSDR.</p>
<p>Nona McQuay: Are you suggesting to us a retrospective cohort study, would that be the way you would want to go?</p>	<p>Dr. John Vena: Yeah that would be the best approach in terms of identifying populations that have been exposed to the site, and tracking them down.</p>

**Questions and Answers from Restoration Advisory Board Members and Members of the Public
Regarding Health Studies (Continued)**

COMMENT	RESPONSE
<p>Nona McQuay: Would you say an example of that approach would be the Love Canal study now going on, to look back and find people who lived there?</p> <p>Audience Member: The point of that was they cleaned it up and now 20 years later they are going to track those people to see if they were affected by it. Let's clean this up and 20 years from now let's see if there are any adverse effects from it. The Love Canal study, yes it's a good study, but their site is already cleaned up.</p>	<p>Dr. John Vena: Yes.</p> <p>The main thing is again it to make sure that there are not populations living near the site who are being exposed. Or to ensure that what's on the site in the future will not go off the site, and to make sure that whatever is done with it is final.</p>

9:10 p.m. Operating Rules - Michelle Barczak the role of the members of the RAB is to provide individual advice and to act as a conduit for information between the public and the decision-makers, and to review and comment on the documents. Emphasis is on individual people giving individual opinions and expressing their ideas. The prohibition against asking this group as a body to give a recommendation or provide advice as a group is the Federal Advisory Committee Act. It prohibits the Federal Government from engaging in sponsoring or paying for groups in any way to give them advice unless they have specific authorization from Congress. You can advise us on the community's input.

Mr. Lamb: Offered the following statement to be included in these minutes: "Although it is not stated in the operating rules, it is agreed that the Advisory Board may vote and offer suggestions and recommendations to the Corps of Engineers." The Board is trying to protect their own integrity. If at some point in the future when they get to the point of decisions, and if there are two or three possible decisions, he would like for the Board to be able to say after consulting with the community, this is what we hope you will do.

Arleen Kreusch: Members of the Board agreed to sign the operating rules provided that the above statement appears in the minutes. Copies of the Engineering Evaluation/Cost Analysis are available if anyone would like them.

Action Items:

- Corps to discuss how they will address the issue of the proximity of the students and employees of the Lewiston-Porter schools to the sites, and what plans may be feasible, as this is a concern of the community.
- Mr. Syms to bring in map which shows the areas where the drums are buried on the NFSS.
- The Corps will run the ad asking for employees of the Niagara Falls Storage Site prior to 1986 to participate in voluntary interviews again to get a broader scope of people. Corps will also asked interviewees if they know of anyone who could be contacted for an interview.
- Posters will be placed in the Ransomville, Lewiston and Youngstown Public Libraries, and respective Town Halls to announce upcoming Restoration Advisory Board Meetings.
- Corps to provide briefing regarding that status of the buildings the Lake Ontario Ordnance Works Site.
- Niagara County Health Department to identify availability of someone from the New York State Health Department to present information on future health studies.
- Corps to send letter to New York State Health Department regarding restraining order.

Nils Olsen: Wanted to know exactly what the process is when the Corps conducts evaluations and finds contamination that they conclude is not necessarily the product of Department of Defense activities. Judy Leithner explained that at the NFSS, since the government owns the property, they would clean it up any way. Bill Kowalewski explained that at the LOOW site, that could fall back to one of two cases where the current landowner voluntarily initiates cleanup, or the regulators require cleanup. The Federal Government would be brought into that process along with any other previous owners by the state of federal regulators directing the site be cleaned up or by the current property owner. This process is known as the “Potentially Responsible Party” process.

Agenda Items for the Next meeting:

- Will follow the same agenda format.
- Announce results of selection committee’s choice for a new Board member.

Next meeting scheduled for November 15, 2000.

Guests Present:	Affiliation:
Sam Jowdy	Self
Peter Calabrese	Barnabite Fathers
Mary Battaglia	USACE, CT
Tara Colangelo	USACE
Alexander W. Kravitz	Self
Jeffrey Smith	Self
Lorraine M. Miller	Self
Jim Wilson	Self
Linda Sullivan	Self
Kara Simpson	Congressman LaFalce
Judy Leithner	USACE
Tom Leithner	Self
Jim Darnell	IT Corporation
Carl Crossen	Environmental Products and Services
Michelle Kenny	Self
Michelle Rhodes	USACE
Shirley Bergland	Self
Lynda Summers	Hasley Construction
John Bis	Self
Steve Mikolaichik	Self
Roberta Mikolaichik	Self
William Kowalski	Self
Chuck Basham	USACE, Baltimore District
Gordy Porter	EA Engineering
Sandy Staigerwald	EA Engineering
Steven Stumpf	Niagara Frontier Wildlife
Andrew Rak	USACE, Baltimore District
Joan Broderick	Self
Marn A. Weld	Self
Arleen Kreusch	USACE, CT
Mary Kay O'Mara	USACE
Bill Kowalewski	USACE
Brenda Herman	EA Engineering
Steve Trask	Niagara Gazette
Alvin Wilkenson	Self
Mary Ann Rolland	Town of Porter Brownfields
Rene Murawski	Self
Edward Larocque	Self
Barbara Haihaus	Self
Robert MacVie	Self
Ann Burke	It Corporation
Linda Shaw	Somerset Group
John S. Vena	University at Buffalo, Env & Society Institute
Steve Welzant	EA Engineering
Tim Webster	Self
Merton Wipert	Town of Porter